

1

SEQUENCE LISTING

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Pro Ser Gly Asp Arg Gly Asp Val Tyr Arg Cys Pro Val Gly Gly 65 70 75 80

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Gly Asn Ser Ser His Pro Ala Val Asn Met His Leu Gly Met Ser Leu 100 105 110

Leu Glu Thr Asp Gly Asp Gly Gly Phe Met Ala Cys Ala Pro Leu Trp 115 120 125

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Val Asp Ala Ser Phe Gln Pro Gln Gly Ser Leu Ala Pro Thr Ala Gln 145 150 155 160

Arg Cys Pro Thr Tyr Met Asp Val Val Ile Val Leu Asp Gly Ser Asn 165 170 175

Ser Ile Tyr Pro Trp Ser Glu Val Gln Thr Phe Leu Arg Arg Leu Val 180 185 190

Gly Lys Leu Phe Ile Asp Pro Glu Gln Ile Gln Val Gly Leu Val Gln 195 200 205

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- Glu Ile Arg Thr Ile Ala Ser Asp Pro Asp Glu Arg Phe Phe Asn 325 330 335
- Val Thr Asp Glu Ala Ala Leu Thr Asp Ile Val Asp Ala Leu Gly Asp 340 345 350
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- Gly Pro Gln Asn Lys Glu Thr Gly Arg Val Tyr Val Tyr Leu Val Gly 515 520 525
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- Pro His Pro Ala Gln Arg Ile Ala Ala Ala Ser Met Pro His Ala Leu 595 600 605
- Ser Tyr Phe Gly Arg Ser Val Asp Gly Arg Leu Asp Leu Asp Gly Asp 610 615 620
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- Asp Glu Trp Thr Ala Gly Ala Arg Ala Ala Phe Asp Gly Ser Gly Gln 705 710 715 720
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- Arg Lys Glu Asn Ala Tyr Asn Thr Ser Leu Ser Ile Ile Phe Ser Arg 835 840 845
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- Pro His Pro Ala Gln Arg Ile Ala Ala Ala Ser Met Pro His Ala Leu 595 600 605
- Ser Tyr Phe Gly Arg Ser Val Asp Gly Arg Leu Asp Leu Asp Gly Asp 610 615 620
- Asp Leu Val Asp Val Ala Val Gly Ala Gln Gly Ala Ala Ile Leu Leu 625 630 635 640
- Ser Ser Arg Pro Ile Val His Leu Thr Pro Ser Leu Glu Val Thr Pro 645 650 655
- Gln Ala Ile Ser Val Val Gln Arg Asp Cys Arg Arg Arg Gly Gln Glu
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- Ala Val Cys Leu Thr Ala Ala Leu Cys Phe Gln Val Thr Ser Arg Thr 675 680 685
- Pro Gly Arg Trp Asp His Gln Phe Tyr Met Arg Phe Thr Ala Ser Leu 690 695 700
- Asp Glu Trp Thr Ala Gly Ala Arg Ala Ala Phe Asp Gly Ser Gly Gln 705 710 715 720
- Arg Leu Ser Pro Arg Arg Leu Arg Leu Ser Val Gly Asn Val Thr Cys 725 730 735
- Glu Gln Leu His Phe His Val Leu Asp Thr Ser Asp Tyr Leu Arg Pro $740 \hspace{1.5cm} 745 \hspace{1.5cm} 750$
- Val Ala Leu Thr Val Thr Phe Ala Leu Asp Asn Thr Thr Lys Pro Gly 755 760 765
- Pro Val Leu Asn Glu Gly Ser Pro Thr Ser Ile Gln Lys Leu Val Pro 770 775 780
- Phe Ser Lys Asp Cys Gly Pro Asp Asn Glu Cys Val Thr Asp Leu Val
 785 790 795 800
- Leu Gln Val Asn Met Asp Ile Arg Gly Ser Arg Lys Ala Pro Phe Val 805 810 815
- Val Arg Gly Gly Arg Arg Lys Val Leu Val Ser Thr Thr Leu Glu Asn 820 825 830
- Arg Lys Glu Asn Ala Tyr Asn Thr Ser Leu Ser Ile Ile Phe Ser Arg 835 840 845
- Asn Leu His Leu Ala Ser Leu Thr Pro Gln Arg Glu Ser Pro Ile Lys 850 855 860
- Val Glu Cys Ala Ala Pro Ser Ala His Ala Arg Leu Cys Ser Val Gly 865 870 875 880

- His Pro Val Phe Gln Thr Gly Ala Lys Val Thr Phe Leu Leu Glu Phe 885 890 895
- Glu Phe Ser Cys Ser Ser Leu Leu Ser Gln Val Phe Gly Lys Leu Thr $900 \hspace{1.5cm} 905 \hspace{1.5cm} 910$
- Ala Ser Ser Asp Ser Leu Glu Arg Asn Gly Thr Leu Gln Glu Asn Thr 915 920 925
- Ala Gln Thr Ser Ala Tyr Ile Gln Tyr Glu Pro His Leu Leu Phe Ser 930 935 940
- Ser Glu Ser Thr Leu His Arg Tyr Glu Val His Pro Tyr Gly Thr Leu 945 950 955 960
- Pro Val Gly Pro Gly Pro Glu Phe Lys Thr Thr Leu Arg Thr Asn Asn 965 970 975
- Ala Ser Cys Ile Val Gln Asn Leu Thr Glu Pro Pro Gly Pro Pro Val 980 985 990
- His Pro Glu Glu Leu Gln His Thr Asn Arg Leu Asn Gly Ser Asn Thr
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- Gln Cys Gln Val Val Arg Cys His Leu Gly Gln Leu Ala Lys Gly Thr 1010 1015 1020
- Glu Val Ser Val Gly Leu Leu Arg Leu Val His Asn Glu Phe Phe Arg 1025 1030 1035 1040
- Arg Ala Lys Phe Lys Ser Leu Thr Val Val Ser Thr Phe Glu Leu Gly
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- Thr Glu Glu Gly Ser Val Leu Gln Leu Thr Glu Ala Ser Arg Trp Ser 1060 1065 1070
- Glu Ser Leu Leu Glu Val Val Gln Thr Arg Pro Ile Leu Ile Ser Leu
 1075 1080 1085
- Trp Iie Leu Ile Gly Ser Val Leu Gly Gly Leu Leu Leu Leu Ala Leu 1090 1095 1100
- Leu Val Phe Cys Leu Trp Lys Leu Gly Phe Phe Ala His Lys Lys Ile 1105 1110 1115 1120
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Thr Xaa Met Leu Phe Ala Asp Ser His Ile Val Ala Xaa Xaa Met Ile
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Arg Tyr Asp Leu Xaa Ser Leu Ile Met Asn Xaa Xaa Arg Asp Ala Asn
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Glu Ile Arg Leu
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Val Tyr Ser His Pro Asn Leu Ser Leu Xaa Thr Thr Gln Ala Xaa Thr

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Ser His Arg Cys Arg Leu Phe Glu Ala Ser Pro Leu Gly Leu Pro Gln 40

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Gly Arg Lys Met Leu Leu Ser Leu Leu Ser Ala Val Ile Leu His Ile
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Pro Cys
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Gly Lys Lys Tyr Cys Leu
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Asn Ser Glu Pro Leu Gly Leu Asp Arg Thr Ser Ala His Gly Val Ser 50 55 60

Leu His Pro Ser Pro Ala Pro Ala Pro Gly Val Ala Asp Arg 65 70 75

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Ser Lys Pro Leu Tyr Leu Ile Ile
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Leu Cys Ile Leu Arg Lys Ala Leu Ser Pro Ser Leu Asp Ser Arg Gly
1 5
Leu Glu Arg Arg Met Cys Arg Arg Asn Asp Val Glu Arg Val Thr
          20 25
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Pro Ile Gln Met Cys Leu
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<400> 86
Met Arg Phe Gln Glu
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<400> 87

Glu Trp Lys Tyr Ser Cys Ala Ser Ala Trp Pro Arg Ala Leu Gly Ser 1 5 10 15

Leu Thr Pro Thr Pro Gln Glu Glu Asn His Pro Ile Ile Pro Pro Gly 20 25 30

Val Leu Arg Thr 35

<210> 88

<211> 7

<212> PRT

<213> Homo sapiens

<400> 88

His Arg Ala Gly Glu Leu Arg

<210> 89

<211> 111

<212> PRT

<213> Homo sapiens

<400> 89

Lys His Ser Leu Leu Ser Cys Leu Pro Leu Ser Leu Thr Ser Pro Ser 1 5 10 15

Leu Thr Asp Trp Trp Met Leu Ile Met Ile Leu Thr Pro Gln Val Ser 20 25 30

Ala Pro Pro Leu Ile Trp Met Asn Thr Thr His Asp Ser Ser Gln Gly 35 40 45

His Gln Arg Pro Asn Leu Asp Thr Val Ser Tyr Ser Met Leu Gly Val 50 60

Asp Ser Asp Gly Glu Arg Glu Asn Arg Gly Pro Trp Asp Arg Asp Tyr 65 70 75 80

Ala Leu Thr Asp Lys Gly Glu Asp Arg Ser Lys Leu Ala Phe Glu Ser 85 90 95

Ala Trp Gly Ser Met Thr Ser His Ala Leu Ser Leu Ser Leu Tyr 100 105 110

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Gly Pro Cys Ser Pro Asp Leu Tyr Ile His Ile Leu Leu Pro Gly Cys
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1 5
Trp Trp Val Pro Pro Gly Met Gly His Gln Val Thr Gly Glu Gly Met
Phe Ile Val Ala Leu
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Gly Asp Ser Thr Val Leu His Val Pro Lys Ala Thr Trp Val Arg Arg
Ser Leu Thr Phe Pro Leu Leu Ile Pro Asp Val Asp Ile
           20
                              25
<210> 92
<211> 7
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Pro Leu Gly Pro Cys Leu Gln
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<211> 6
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Thr Lys Glu Ala Glu Leu
1 5
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<211> 25
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Pro His Asp Phe Ile Leu Phe Tyr Pro Ser Ser Asn Gln Val Thr Ile
                                   10
Asn Leu Glu Ile Pro Leu Ser Leu Leu
            20
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Gly Cys Leu Tyr
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Arg Gln Met Leu Met Gly Asp Ser Trp
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<211> 76
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<213> Homo sapiens
<400> 97
Ala Glu Arg Arg Ala Ser Glu Gly Ser Gln Gln Gly Arg Glu His Tyr
                5
Gly Ile Trp Ala Val Val Ala Trp Ala Phe His Pro Ser Val Leu Glu
            20
                                25
Ala Glu Ser Gly Leu Ile Tyr Arg Val Ser Ser Arg Thr Ala Lys Ala
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Met Gln Arg Asn Pro Val Leu Lys Asn Pro Lys Pro Lys Leu Thr Lys

Gln Gln Gln Lys Lys His Arg Gly Lys Gly Asn 70

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<211> 84

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<213> Homo sapiens

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Lys Arg Gln Gly Ile Gln Asn Pro Arg Glu Gln Gly Arg Val Pro His

1 10 15

Gly Val Val Ser Ile Ser Leu Leu Thr Arg Cys Val Phe Arg Glu Ala 20 25 30

Leu Ser Ser Leu Gly Ile Thr Ile Ser Pro Ile His Pro Gly Leu Cys 35 40 45

Pro Ser Leu Val Ser Cys Leu Arg Gln Leu Cys Leu Gln Phe Trp Asn 50 55 60

Met Cys Pro Cys Gly Cys Phe Ile Pro Ala Pro Gly Lys Pro Gly Thr 65 70 75 80

His Arg Pro Thr

<210> 99

<211> 46

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<213> Homo sapiens

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Ala Ser Gly Arg Ala Leu Glu Ala Gln Phe Pro Asp Arg Asp Ala Gly
1 5 10 15

Trp Glu Lys Leu Gly Gln Arg Leu Gly Gly Gly Ser Ala Trp Leu Ser 20 25 30

Ser Ser Phe Pro Ser Val Leu Ala Glu Glu Ala Pro Val Cys 35 40 45

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Leu Ile Arg Ile Gln Thr Pro

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<211> 41

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<213> Homo sapiens

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Glu Ser Leu Lys Thr Pro Gly Ser Gly Phe Thr Asn Leu Lys Thr Lys 1 $$ 5 $$ 10 $$ 15

Gln Asn Ser Ile Ser Cys Ala Gln Pro Ile Pro His Pro Ser Arg Val 20 25 30

Leu His Ile Leu Phe Leu Trp Val Leu 35 40

<210> 102

<211> 26

<212> PRT

<213> Homo sapiens

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Met Pro Ser Gln His Ser Val Ile Gly Phe Ser Pro His Ala Phe His 1 5 10 15

Ile Leu Ser Tyr Leu Leu Pro Phe Gly Arg

<210> 103

<211> 45

<212> PRT

<213> Homo sapiens

<400> 103

Ser Tyr Val Ala Gln Ala Val Leu Asp Leu Gly Ile Cys Leu Pro Gln 1 5 10 15

Leu Leu Ser Leu Lys Tyr Trp Asp Asn Arg His Ala Leu Ser Ala Trp
20 25 30

Pro Leu Leu Asn Met Pro Ser Val Ala Ile Gly Arg Ala 35 40 45

<210> 104

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Val Lys Tyr Cys Pro Pro Pro Gln His Thr His Lys Arg Lys

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Gly Ser Leu Ser Val Pro
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His Arg Val Val Val Gly Leu Ser Leu Val His Ile Ser Phe Phe Tyr
                                    10
Ser Ala His Leu Phe Phe Leu
            20
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Phe Pro His Trp Gly Pro Gly Ile Val Leu Ser Trp
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Leu Arg Glu Asn Ser Leu Leu Ser Ala Cys Ile Ala Ala Ser Ser Trp
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Asp Ile Leu Pro Cys
            20
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Leu His Pro Thr Ser Phe His Val Phe Cys Phe Pro Ser Leu Cys Pro
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Pro Ser Arg Leu Ser His Ile His Gly Cys Arg His Cys Phe Gly Trp

Leu Gln Gln Tyr Leu Ser Leu Val Arg Ser Ser Asp Phe Pro Ser Glu 35 40 45

Ala Gly Arg Lys Thr Val His Arg Ser Gly Ala Asp Thr Gly Lys Arg 50 60

Lys Ile Cys Gly

<210> 110

<211> 21

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<213> Homo sapiens

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Asp Trp Arg Glu Arg Ser Lys His Ser Trp Thr Leu Gly Cys Lys Gln 1 5 10 15

Pro Cys Pro Ala Ser 20

<210> 111

<211> 33

<212> PRT

<213> Homo sapiens

<400> 111

His Pro Gly Thr Leu Ser Ser Thr Glu Leu Met Leu Lys Asn Cys Ala 1 5 10 15

Ile Asn Leu Pro Lys Ser His Lys Asn Phe Ile Met Phe Glu Val Ser 20 25 30

Leu

<210> 112

<211> 123

<212> PRT

<213> Homo sapiens

<400> 112

Leu Cys Gly Gly Pro His Ser Glu Leu Pro Phe Ala Ala Cys Ser Cys 1 $$ 5 $$ 10 $$ 15

Leu Gly Asn Ala Cys His Glu Leu Gln Val Arg His Thr Cys Ser Leu 20 25 30

Pro Leu His Arg Ala Ala Gly Trp Thr His Leu Leu Gly Val His Phe 35 40 45

Pro Phe Ile Leu Cys Ala Pro Ser Ser Leu Arg Ser Ser Tyr Ile Pro 50 55 60

Cys Gly His Met Val Tyr Cys Ser Gln Val Gly Leu Val Gln Tyr Gly 65 70 75 80

Glu Asn Pro Val His Glu Trp Ser Leu Gly Asp Phe Arg Thr Lys Glu 85 90 95

Glu Val Val Arg Ala Ala Arg Asn Leu Ser Arg Arg Glu Gly Arg Glu
100 105 110

Thr Arg Thr Ala Gln Ala Ile Met Val Ala Trp 115 120

<210> 113

<211> 91

<212> PRT

<213> Homo sapiens

<400> 113

Asp Ile Val Lys Gly Ser Cys Glu Gly Gly Gly Arg Ile Ser Arg Glu 1 5 10 15

Arg Glu Arg Val Trp Ser Val Val Tyr Thr Ser Gln Asp Ala Leu Gly 20 25 30

Ala Tyr Leu Tyr Leu His Ala Arg Ser Ser Trp Arg Lys Ala Arg Leu $35 \hspace{1.5cm} 40 \hspace{1.5cm} 45$

Leu Ser Pro Tyr Ser Leu Leu Leu Tyr Leu His Phe Met Val Ser Val 50 55 60

Gly Val Ser Leu Leu Val Cys Ser Val Ser Ala His Arg Thr Pro Ser 65 70 75 80

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Phe Leu Phe Tyr Ser Cys Val Asn Ser Asp Thr
      85
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Leu Leu Asn His Ser Arg Pro Ser Ile Leu Phe Lys His Asp Ser Lys
               5
Pro Leu Gly Arg Leu His Asp Leu Thr Val Phe Ile Leu Gln Phe Leu
Asp Leu Val Asn Pro Ser Val Cys
      35
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Ile Asn Asn Ala Cys Thr Tyr Leu His
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<211> 22
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<213> Homo sapiens
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Gln Ile Ile Leu Tyr Val Pro Cys His Leu Asn Ser Gln Val Val Thr
                            10
Leu Cys Gln Phe Ala Cys
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<211> 10
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<213> Homo sapiens
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<400> 117

Ile Lcu Leu Gly Asn Gly Val Glu Asp Ile
1 5 10

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  Thr Ala Asp Ser Val Asn Thr Leu Tyr Gly His Ala Cys Met Gln Ala
  Cys Val Tyr Val Cys His Ala Tyr Ala His Thr Tyr Ile
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  Pro Tyr Ser Ile Leu Leu Ser Leu Phe Leu Ala Gln Lys Gly Ser Val
                                  10
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  Ser Pro Gly Gly Asp Asp Gln Arg Pro Leu Gly Cys Trp
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  Leu Ser Leu Met Glu Ser Pro Met Met Glu Arg Asn Phe Gln Gln Arg
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  Arg Pro Val Arg Leu Ala Glu
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  <213> Homo sapiens
  <400> 122
  His Val Met Gly Leu Arg
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25

10

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Asp Leu Ile Lys Ser Ser Cys Phe Val Leu Cys Cys Ile Val Cys Val
Cys Val Cys Val Cys Val Cys Val Cys Val Tyr Val
           20
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<211> 46
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Tyr Val Cys Met His Gln Cys Thr Tyr His Ser Val Tyr Met Arg Val
           5
Arg Glu Gln Pro Gln Met Leu Val Leu Thr Phe His Leu Val Pro Asn
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Trp Ile Ser Cys Ser Leu Arg His Thr Ile Ser Gln Ile Ser

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Pro Thr Ser Leu Gly Gln Val Phe Cys Leu Ser Leu Leu Ser Leu Gly

Leu Arg His Ser Gly Ile Tyr Arg 20

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Ser Gly Arg His Gln Gly Ser
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Leu Xaa Lys Xaa Xaa Ser Met Thr Xaa Gly Pro Arg

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Xaa Xaa Ser Xaa Xaa Xaa Asp Asp Gly Pro Ala Xaa Arg Xaa Xaa
                                    10
                5
Xaa Xaa Ala Xaa Xaa Val Gln Xaa Xaa Xaa Gly Thr Xaa Gly Xaa
                                25
Ala Arg Xaa Pro
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Gly Ser Gly Thr Met Xaa Xaa Arg Xaa Thr Xaa Xaa Asp Xaa Ser Xaa
Val Gly Arg Arg Asn Xaa Lys Val Xaa Val Xaa Xaa Xaa Xaa Gly
Xaa Asp Xaa Xaa Thr Xaa Xaa Xaa Xaa Gly Thr Gly Glu Xaa Xaa
        35
                            4.0
Xaa Val Ser Glu Glu Xaa Xaa Arg Thr Xaa Leu Pro Lys Ser Gly Leu
Xaa Xaa Asp Thr Xaa Xaa Xaa Ser Xaa Xaa Gly Xaa Ser Glu Cys Xaa
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Asn Xaa Xaa Xaa Val Tyr Xaa Asn Xaa Lys Xaa Gly His Leu Leu

90

Xaa Glu Glu Ser Ser Gln Ile Thr 100

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Asp Asp Leu Xaa Trp Gly Pro Val Ala Ser Ile
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Glu Asp Trp Phe Gly Arg His Xaa Cys Ser Leu Leu Thr His Ile Leu
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Leu Pro
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Ser Asp Thr Ile Xaa Cys Pro Ser Ser
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Xaa Cys Tyr Ser Arg Arg Met Lys Val Ser Arg Val Gly Val Ser Gly 20 25 30

Gly Glu Lys Leu Trp Thr Trp Arg Thr Arg Asp Ser Arg Arg Lys Xaa 35 40 45

Pro Gln Leu Ala Xaa Ser Phe Gly Ser Asp Pro Asp Thr Gly Ser Ser 50 55 60

Xaa Glu Leu Ser Pro Ser Leu Ala Gly Trp Leu Arg Asn Ala Trp Thr 65 70 75 80

Phe Ser Ser Pro Leu Asp Lys Leu Gly Val Trp Arg Cys Gly Pro Gly 85 90 95

Ile Val Gly Leu Cys Gly Leu Ile Ser Ser Ile Leu Ser Ile Leu Thr 100 \$105\$

Leu Ile Cys Pro Trp Xaa Arg Leu Lys Pro Xaa Leu Thr Xaa Trp Tyr 115 120 125

Lys Ile Arg Arg Glu Pro Arg Trp Val Arg Trp Lys Leu Arg Trp Xaa 130 135 140

Ile Gln Ile Xaa Arg Asp Glu Gly Lys Asn Leu Pro Lys Thr Gly Gln
165 170 175

Glu Gly Ser Ala Lys Gly Arg Leu Leu Gln Ala Ser Ala Val Gly Leu 180 185 190 His Ser Val Pro Leu Pro Glu Ser His Ser Ser Ser Xaa Tyr Leu Ser 200 Val Leu Ser Leu Val Lys Asn Leu Leu Pro Glu Thr Glu Phe Ser Phe 215 Leu Ala Ser Trp Pro Asp Ile 230 225 <210> 135 <211> 16 <212> PRT <213> Homo sapiens <400> 135 Lys Glu Gly Gly Leu Leu Phe Gly Arg Gly Ser Leu Ser Tyr Gly 10 <210> 136 <211> 9 <212> PRT <213> Homo sapiens <400> 136 Gln Ser Ala Asn Cys Ile Leu Phe Phe 5 <210> 137 <211> 69 <212> PRT <213> Homo sapiens His Phe Ser Ser Leu Pro Pro Ser Ile Leu Ser Gln Ala Phe Ser His 10 5 Ala Arg Arg Leu Phe Ala His Thr Ala Ala Gly Cys Leu Arg Leu Leu Pro Trp Val Cys Leu Ser Arg Leu Pro Pro His Phe Pro Val Ser Ala

Tyr Thr Leu Ile Leu Glu Phe Pro Ser Pro Leu Gly Ser Cys Ser Phe

55

60

Ser Asp Tyr Pro Gly 65

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Cys His Val Trp Pro Leu Pro Val Asn Thr Val Gln
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Phe Tyr Val Asn Asn Trp Ser Leu Pro Thr Glu Gln Ala Ser Leu Leu
                                   10
Gly
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Gln Ile Lys Asp Gln Val Cys Ser Leu Thr Phe Leu Phe Asn Ser Arg
               5
Trp Arg Gly Val Gly Trp Gly Gly Leu Pro Val Phe Thr Val Val
                                25
Pro Arg Gln Gly
       35
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Ser Ser Glu Leu Pro Cys Phe Arg Leu Leu Ser Ser Leu Gln
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Val Leu Leu Cys Pro Ala Ala Arg
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His Leu Val Ser His Gly Leu Val Ile Val Ser Leu Ser Ser Leu Thr
Val Asp Gly Phe Pro Trp Arg
           20
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Gln Leu Thr Trp Leu Gln Asp Phe Thr Glu Asn Leu Asn Val Gly Gly
                   10
Lys Val Arg Thr His His Asn Gly Pro Asn Ser Lys Gln Ser Val Lys
                              25
                                    30
           2.0
Gln Pro Gln Val Arg Gly Glu Met Phe Ser Thr Lys Val Ile Ile Leu
Thr Pro Gln Ser Thr Pro Val Tyr Arg Gln
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Leu Pro Lys Ser Tyr
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Thr His Asn Lys His Asp His Asn Ser Val Asp Trp Gln Gly His Thr 1 5 10 15

Val Gly Leu Pro Phe Thr Gln 20

<210> 147

<211> 40

<212> PRT

<213> Homo sapiens

<400> 147

Val Gly Lys Cys Cys Cys His Cys Cys Gln Leu Leu Phe Cys Ile Ser 1 10 15

His Val Lys Ile Asn Lys Ala Lys Asn Ile Val Ser Lys Ser Tyr Phe

Leu Phe Gln Thr Gly Gly Asn Tyr 35 40

<210> 148

<211> 21

<212> PRT

<213> Homo sapiens

<400> 148

Ile Asn Lys Pro Cys Ile Lys Val Ala Ser Glu Arg Val Lys Ile Cys 1 $$ 5 $$ 10 $$ 15

Val Phe Phe Glu Tyr 20

<210> 149

<211> 40

<212> PRT

<213> Homo sapiens

<400> 149

Leu Arg Pro Pro Gly Gly Ser Thr Lys Val Glu Ser Trp Thr Lys Ala
1 5 10 15

Ala Leu Cys Ser Cys Pro Gly Leu Pro Thr Ala Pro Phe His His His 20 25 30

Ser His Ser Ile Gln Leu Tyr Phe 35 40

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Lys Glu Arg Asp Arg Ala Thr Gln Ser Leu Ser Asp Trp Thr Gly Gln 20 25 30

Ala Pro Met Glu Ser Leu Ser Ile Pro His Leu Leu Pro Leu Ala 35 40 45

Xaa Leu Thr Gly Glu Gly Ser Lys Leu Gly Phe Cys Trp Glu Trp Lys 50 55 60

Leu Cys Gly Leu Phe Ile Ile Gly Thr Ile Met Ala Lys Ile Xaa Arg 65 70 75 80

Ala Leu Arg Ser Glu Val Asn Thr Asp Ala Ile Phe Pro Val Cys Thr 85 90 95

His Val Leu Arg His Pro Asn Gly Ser Gly Gln Asn Phe Leu Trp Leu 100 105 110

Val Pro His Tyr Leu Asn Leu Cys Thr 115 120

<210> 151

<211> 46

<212> PRT

<213> Homo sapiens

Leu Ser Lys Thr Leu Val Leu Asn Ser Thr Asp Met Arg Ala Gln Lys

1 10 15

Arg Asp Val Ser Leu Ile Phe His Ser Val Thr Leu Ile Pro Thr Phe 20 25 30

Pro Ala Ser Pro Cys His Trp Cys Ser Leu Val Pro Glu Ala 35 40 45

<210> 152

<211> 46

<212> PRT

<213> Homo sapiens

<400> 152

Leu Pro Tyr Tyr Val Val Arg Thr Leu Gly Ser Pro Asn Asp Arg Ala 1 5 10 15

Thr Val Ser Gly Leu Ile Ala Leu Pro Ile Ser Trp Ile Lys Lys Lys 20 25 30

Arg Leu Thr Tyr Lys Ile Pro Phe Leu Lys Met Ser Thr Val 35 40 45

<210> 153

<211> 44

<212> PRT

<213> Homo sapiens

<400> 153

Val Glu Val Arg Phe Trp Gly Met Glu Gly Cys Leu Asp Ala Lys Ser 1 10 15

Lys Thr Val Glu Lys Arg Ile Met Gly Gly Ile Arg Gly Trp Asn Phe $20 \\ 25 \\ 30$

Ser Leu Leu Val Pro Tyr Asn Leu Cys Phe Leu Lys 35 40

<210> 154

<211> 35

<212> PRT

<213> Homo sapiens

<400> 154

Phe Tyr Gly Asn Trp Gly Gln Glu Lys Gly Ile Ser Arg His Arg Trp 1 5 10 15

Asp Pro Lys Arg Gly Leu Lys Phe Glu Glu Thr Met Gly Val Gly Lys 20 25 30

Gly Cys Leu 35

<210> 155

<211> 106

<212> PRT

<213 > Homo sapiens

<400> 155

Asp Glu Glu Ile Val Val Gly Gly Ser Leu Gly Gly Asp Arg Thr Leu 1 5 10 15

Asn Arg Asp Arg Trp Gln Thr Val Cys Gly Gln Ala Gly Gly Ser Thr 20 25 30

His Leu Ile Ser Val Glu Val Gly Arg Ala Gly Arg Ser Gln His Ser 35 40 45

Gln Pro Trp Arg Lys Cys Lys Cys Asp Lys Lys Lys Gln Lys Glu Glu 50 55 60

Thr Pro Gly Gln Gly Ala Pro Cys His Arg Phe Phe Pro Trp Pro Trp 65 70 75 80

Leu Trp Glu Glu Leu Gly Lys Gly Gly Asp Ser Ala Ser Ser Glu Lys 85 90 95

Pro Ser Leu Pro Leu Trp Thr Leu Glu Ala 100 105

<210> 156

<211> 12

<212> PRT

<213> Homo sapiens

<400> 156

Arg Gly Glu Cys Val Gly Gly Met Met Trp Lys Glu 1 5 10

<210> 157

<211> 9

<212> PRT

<213> Homo sapiens

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Leu Asp Leu Ser Arg Cys Val Cys Glu
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<210> 158
<211> 18
<212> PRT
<213> Homo sapiens
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Asp Phe Arg Asn Glu Asn Gly Asn Thr Ala Val Leu Gln His Gly Arg
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Gly Pro
<210> 159
<211> 19
<212> PRT
<213> Homo sapiens
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Asp Pro Ser Pro Pro Pro His Arg Lys Arg Ile Ile Gln Ser Ser His
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Leu Gly Phe
<210> 160
<211> 10
<212> PRT
<213> Homo sapiens
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Gly His Asp Ile Asp Thr Glu Gln Glu Ser
<210> 161
<211> 11
<212> PRT
<213> Homo sapiens
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Asp Arg Asn Thr Pro Ser Cys Leu Val Ser His
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<211> 6
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<213> Homo sapiens
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Ala Ser Pro Val Leu His
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<213> Homo sapiens
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Leu Ile Gly Gly Cys
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<211> 10
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<213> Homo sapiens
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Ser Ser Pro Leu Arg Ser Leu Leu Pro Leu
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<211> 61
<212> PRT
<213> Homo sapiens
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Thr Pro Pro Thr Thr Leu His Arg Ala Thr Arg Gly Arg Ile Trp Ile
Gln Cys Leu Thr Ala Cys Trp Gly Trp Thr Ala Met Val Arg Gly Lys
Thr Glu Asp Arg Gly Ile Gly Thr Met His Ser Leu Ile Lys Gly Arg
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Thr Gly Pro Ser Trp Pro Leu Lys Val Pro Gly Ala Pro
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<210> 166
<211> 37
<212> PRT
<213> Homo sapiens
<400> 166
Arg Leu Met His Ser Pro Ser His Tyr Thr Lys Asp His Ala His Arg
              5
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Ile Phe Ile Ser Ile Phe Ser Phe Gln Asp Ala Gly Gly Cys Pro Leu

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25
Gly Trp Ala Ile Arg
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<210> 167
<211> 24
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<213> Homo sapiens
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Pro Glu Arg Gly Cys Leu Ser Leu Leu Tyr Arg Gly Ile Pro Gln Cys
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Ser Met Tyr Gln Arg Pro Pro Gly
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<210> 168
<211> 4
<212> PRT
<213> Homo sapiens
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Pro Phe Pro Cys
<210> 169
<211> 40
<212> PRT
<213> Homo sapiens
<400> 169
Phe Leu Met Leu Thr Ser Ser Asn Ser Asp Pro Leu Asp Leu Val Phe
                                  10
Asn Asp Pro Glu Leu Lys Lys Pro Asn Tyr Asp Pro Met Thr Ser Phe
Ser Ser Thr Leu Pro Pro Thr Arg
<210> 170
<211> 24
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<213 > Homo sapiens
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Leu Ser Thr Trp Lys Phe Leu Ser Ala Cys Cys Glu Tyr Ala Pro Arg
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                   10
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Asp Val Ser Thr Arg Asp Arg Cys
<210> 171
<211> 42
<212> PRT
<213> Homo sapiens
<400> 171
Trp Gly Ile His Gly Glu Leu Lys Glu Gly Pro Gln Lys Val His Ser
Arg Glu Glu Ser Ile Met Val Ser Gly Gln Trp Trp Leu Gly Pro Phe
            20
                                25
Ile Pro Val Phe Trp Arg Gln Ser Gln Ala
<210> 172
<211> 13
<212> PRT
<213> Homo sapiens
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Ala Pro Gly Gln Pro Arg Leu Cys Arg Glu Thr Leu Phe
<210> 173
<211> 6
<212> PRT
<213 > Homo sapiens
<400> 173
Lys Thr Gln Asn Gln Asn
<210> 174
<211> 41
<212> PRT
<213> Homo sapiens
<400> 174
Pro Asn Asn Asn Asn Arg Lys Ser Thr Val Val Arg Glu Ile Ser Leu
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Tyr Arg Arg Asp Lys Glu Phe Lys Thr Leu Glu Ser Lys Ala Gly Phe

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Pro Met Glu Trp Ser Pro Ser Leu Phe 35 40

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<211> 13

<212> PRT

<213> Homo sapiens

<400> 175

Leu Gly Val Cys Ser Glu Arg Pro Ser Gln Ala Trp Gly
1 5 10

<210> 176

<211> 66

<212> PRT

<213> Homo sapiens

<400> 176

Leu Phe Leu Leu Ser Thr Gln Ala Cys Ala Pro Leu Trp Ser Arg Ala 1 5 10 15

Cys Gly Ser Ser Val Phe Ser Ser Gly Ile Cys Ala Arg Val Asp Ala 20 25 30

Ser Phe Arg Pro Gln Gly Ser Leu Ala Pro Thr Ala Gln Arg Glu Pro 35 40 45.

Val Glu Gly Pro Trp Lys Leu Ser Ser Gln Ile Gly Met Leu Gly Gly 50 55 60

Lys Asn

65

<210> 177

<211> 27

<212> PRT

<213> Homo sapiens

<400> 177

Asp Lys Asp Leu Val Glu Gly Leu His Gly Tyr Pro His His Ser Gln 1 5 10 15

Val Cys Leu Gln Lys Arg Leu Leu Phe Ala Asn 20 25 <210> 178

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<211> 19
<212> PRT
<213> Homo sapiens
<400> 178
Leu Glu Phe Arg Leu Leu Arg Arg Ala Ser Arg His Gln Asp Leu Val
                5
                                    10
Leu Pro Thr
<210> 179
<211> 58
<212> PRT
<213> Homo sapiens
<400> 179
Lys Gln Asn Lys Thr Ala Tyr Pro Val His Ser Leu Ser Leu Ile His
His Val Ser Ser Ile Ser Tyr Phe Cys Gly Ser Tyr Arg Cys Gln Val
Ser Thr Gln Leu Leu Gly Ser Pro Leu Met Pro Phe Ile Tyr Phe Leu
        35
                            40
Ile Tyr Cys Leu Leu Gly Asp Ser Leu Met
                        55
<210> 180
<211> 31
<212> PRT
<213> Homo sapiens
<400> 180
Pro Arg Leu Ser Leu Ile Leu Glu Phe Ala Cys Leu Ser Phe Ser Val
Ser Ser Thr Gly Ile Ile Gly Met His Cys Leu Pro Gly Leu Cys
<210> 181
<211> 28
<212> PRT
<213> Homo sapiens
<400> 181
Thr Cys Pro Leu Trp Pro Leu Val Gly His Glu Ser Asn Thr Ala Leu
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Pro His Asn Thr His Thr Asn Glu Ser Glu Ala Leu

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<210> 182
<211> 6
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<213> Homo sapiens
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Val Phe His Ser Thr Gly
<210> 183
<211> 22
<212> PRT
<213> Homo sapiens
Cys Ile Phe His Ser Phe Thr Leu Pro Ile Ser Ser Phe Phe Asp Phe
                5
                                10
His Thr Gly Asp Leu Ala
            20
<210> 184
<211> 5
<212> PRT
<213> Homo sapiens
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Tyr Phe Pro Gly Asn
<210> 185
<211> 5
<212> PRT
<213> Homo sapiens
<400> 185
Glu Arg Ile Pro Phe
               5
<210> 186
<211> 132
<212> PRT
<213> Homo sapiens
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Val Pro Ala Leu Gln Arg Pro Pro Gly Thr Phe Ser Leu Ala Asp Tyr

1 5 10 15

Thr Pro His Pro Ser Met Phe Phe Val Ser His His Tyr Ala Pro Leu 20 25 30

Leu Gly Cys Pro Thr Tyr Met Asp Val Val Ile Val Leu Asp Gly Ser 35 40 45

Asn Ser Ile Tyr Pro Trp Ser Glu Val Gln Thr Phe Leu Arg Arg Leu 50 55 60

Val Gly Arg Leu Phe Ile Asp Pro Glu Gln Ile Gln Val Arg Glu Arg 65 70 75 80

Tyr Val Asp Arg Ile Gly Gly Lys Glu Val Asn Thr Pro Gly Pro Leu 85 90 95

Asp Val Ser Ser His Val Gln Pro Leu Asp Asp Thr Leu Gly His Cys 100 105 110

Leu Leu Gln Asn Ser Cys Ser Arg Thr Val Gln Leu Thr Tyr Lys Val 115 120 125

Thr Lys Ile Ser 130

<210> 187

<211> 46

<212> PRT

<213> Homo sapiens

<400> 187

Val Tyr Asp Cys Val Gly Gly His Thr Gln Ser Phe Pro Leu Leu 1 5 10 15

Val Val Ala Trp Ala Met His Ala Met Ser Cys Lys Leu Asp Thr Pro 20 25 30

Val His Phe Pro Phe Ile Val Leu Gln Val Gly His Thr Cys 35 40 45

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<210> 188
<211> 29
<212> PRT
<213> Homo sapiens
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Gly Phe Thr Ser Pro Ser Ser Phe Val Leu His Leu Leu Tyr Ala Leu
            5
                                    10
His Thr Ser His Val Gly Thr Trp Ser Ile Val Leu Arg
                                25
<210> 189
<211> 24
<212> PRT
<213> Homo sapiens
Asp Trp Tyr Ser Thr Gly Arg Thr Leu Cys Met Ser Gly Pro Trp Glu
                                   10
Thr Ser Glu Gln Arg Lys Lys Leu
<210> 190
<211> 5
<212> PRT
<213> Homo sapiens
<400> 190
Glu Gln Gln Gly Thr
<210> 191
<211> 21
<212> PRT
<213> Homo sapiens
<400> 191
Val Gly Gly Lys Gly Glu Lys Arg Glu Pro Pro Lys Arg Ser Trp Trp
His Gly Glu Thr Leu
            20
<210> 192
<211> 19
<212> PRT
<213> Homo sapiens
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-400× 192

Arg Gly Arg Val Arg Glu Glu Glu Gly Ser Ala Gly Arg Gly Arg Gly 1 5 10 15

Ser Gly Val

<210> 193

<211> 92

<212> PRT

<213> Homo sapiens

<400> 193

Cys Ile His His Lys Met Leu Trp Ala Leu Ile Phe Ile Cys Met Pro 1 5 10 15

Glu Val Arg Gly Gly Arg Leu Gly Cys Cys His His Thr Leu Ser Tyr \$20\$ \$25\$ \$30\$

Cys Ile Cys Ile Leu Trp Cys Leu Trp Val Tyr Leu Ser Leu Ser Val 35 40 45

Leu Phe Leu His Thr Glu Leu His Leu Ser Ser Ser Thr Pro Ala Ser 50 55 60

Ile Leu Ile Pro Ser Phe Ser Thr Thr His Ala Leu Val Phe Phe Ser 65 70 75 80

Asn Met Thr Leu Asn Leu Trp Gly Gly Tyr Met Thr 85 90

<210> 194

<211> 17

<212> PRT

<213> Homo sapiens

<400> 194

Leu Ser Leu Phe Ser Ser Ser Leu Ile Leu Ser Thr Gln Val Phe Ala 1 5 10 15

Glu

<210> 195

<211> 19

<212> PRT

<213> Homo sapiens

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Ile Met Leu Val His Ile Tyr Thr Asp Asp Arg Leu Phe Tyr Met Phe
              5
                                   10
Arg Ala Ile
<210> 196
<211> 4
<212> PRT
<213> Homo sapiens
<400> 196
Thr Val Lys Leu
<210> 197
<211> 14
<212> PRT
<213> Homo sapiens
<400> 197
Leu Cys Ala Ser Leu His Ala Arg Tyr Cys Trp Gly Met Val
                    10
<210> 198
<211> 45
<212> PRT
<213> Homo sapiens
<400> 198
Lys Thr Ser Asp Leu Ser Glu Leu Leu Thr Val Leu Ile His Tyr Thr
              5
                                                       15
Gly Met Pro Ala Cys Lys Pro Val Cys Met Cys Met His Met His Thr
           20
His Thr Tyr Asp His Ile Ala Phe Phe Tyr Leu Ser Ser
                           40
<210> 199
<211> 15
<212> PRT
<213> Homo sapiens
<400> 199
His Arg Arg Val Gln Ser Val Pro Gly Gly Thr Thr Arg Gly Arg
               5
                                   10
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<210> 200
<211> 6
<212> PRT
<213> Homo sapiens
<400> 200
Ala Ala Gly Ser Cys His
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<211> 4
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Trp Arg Val Pro
<210> 202
<211> 11
<212> PRT
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<400> 202
Trp Arg Gly Thr Ser Ser Ser Ala Lys Gly Leu
<210> 203
<211> 13
<212> PRT
<213> Homo sapiens
<400> 203
Gly Trp Gln Ser Asp Thr Leu Trp Asp Cys Gly Glu Thr
<210> 204
<211> 70
<212> PRT
<213> Homo sapiens
<400> 204
Ser Ser Pro Val Val Leu Phe Cys Val Val Ser Cys Val Cys
Val Cys Val Cys Val Cys Val Cys Met Cys Asp Met Cys Ala
           20
                               25
                                     30
Cys Ile Ser Ala His Thr Ile Val Cys Ile Cys Gly Ser Glu Asn Asn
       35
                           40
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Leu Arg Cys Trp Ser Ser Pro Ser Ile Leu Phe Gln Thr Gly Tyr Leu
                55
Val His Phe Gly Ile Gln
<210> 205
<211> 21
<212> PRT
<213> Homo sapiens
<400> 205
Ala Arg Leu Ala Asp Pro Gln Val Leu Gly Arg Ser Ser Val Ser Ala
Ser Cys Leu Leu Val
            20
<210> 206
<211> 29
<212> PRT
<213> Homo sapiens
Gly Ile Leu Glu Phe Thr Asp Lys Leu Asp Ile Glu Phe Leu Gln Pro
                                    10
Gly Gly Ser Thr Ser Ser Arg Ala Ala Ala Thr Lys Gly
<210> 207
<211> 8
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<400> 207
Gln Ser Xaa Xaa Lys Xaa Glu Val
               5
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<210> 208
<211> 11
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<223> Variable amino acid
<400> 208
Pro Val Gly Xaa Asp Xaa Xaa Xaa Ala Xaa Xaa
<210> 209
<211> 110
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<223> Variable amino acid
<400> 209
Arg Thr Met Xaa Xaa Pro Xaa Xaa Xaa Xaa Arg Xaa Xaa Xaa Ser
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Lys Xaa Xaa Ser Gln Glu Pro Thr Xaa Trp Leu Ala Xaa Xaa Arg Asp 20 25 30

Gln Xaa Arg Xaa Leu Xaa Xaa Leu Xaa Xaa Ile Asn Arg Xaa Xaa 35 40 45

Xaa Gly Gly Gly Ile Xaa Lys Xaa Trp Xaa Xaa Xaa Xaa Xaa Xaa Met 50 60

Xaa Xaa Arg Leu Xaa Arg Xaa Xaa Xaa Val Gln Ala Xaa Thr Xaa Xaa 65 70 75 80

Cys Leu Arg Xaa Ser Xaa Gly Gln Xaa Cys Arg Ser Xaa Asp Leu Xaa 85 90 95

Xaa Ile Arg Xaa Xaa Asp Leu Xaa Xaa Gly Xaa Ala Ser Ala
100 105 110

<210> 210

<211> 15

<212> PRT

<213> Homo sapiens

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<223> Variable amino acid

<400> 210

Thr Xaa Xaa Gly Xaa Ser Thr Xaa Thr Pro Xaa Xaa Asp Ile Tyr 1 5 10 15

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<211> 11
<212> PRT
<213> Homo sapiens
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<223> Variable amino acid
<400> 211
Xaa Arg Arg Val Ala Arg Ser Xaa Glu Met Ile
<210> 212
<211> 20
<212> PRT
<213> Homo sapiens
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<221> MOD_RES
<222> (1)..(1)
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<400> 212
Xaa Gly Val Pro Leu Pro Val Tyr Glu Arg Thr Gly Ser Ala Asp Ile
               5
Asp Ala Leu Cys
            20
<210> 213
<211> 22
<212> PRT
<213> Homo sapiens
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<223> Variable amino acid
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<223> Variable amino acid
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<223> Variable amino acid
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Leu Thr Tyr Cys Cys Xaa Glu Xaa Asp Gln Ile Arg Ser Xaa Val Pro
                                    10
His His Glu Xaa Xaa Pro
            20
<210> 214
<211> 15
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<213> Homo sapiens
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Asp Ser Pro Met Met Glu Gln Glu Thr Xaa Ala Thr Ala Gly Glu
                5
<210> 215
<211> 4
<212> PRT
<213> Homo sapiens
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Arg Phe Leu Glu
<210> 216
<211> 59
<212> PRT
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Glu Ser Gln Glu Glu Arg Asn Cys Gly Pro Gly Gly Pro Gly Thr Pro
Gly Gly Ser Xaa His Asn Trp Leu Xaa Val Ser Ala Pro Ile Leu Ile
                               25
Xaa Ala Arg Pro Xaa Ser Tyr Pro Pro Leu Leu Asp Gly Ser Glu
                           4.0
Met Pro Gly Pro Phe His Pro His Trp Thr Asn
    50
<210> 217
<211> 24
<212> PRT
<213> Homo sapiens
<400> 217
Ala Ser Gly Val Val Ala Leu Gly Leu Trp Gly Cys Val Ala Ser Tyr
Pro Pro Phe Cys Leu Phe Ser Pro
        20
<210> 218
<211> 10
<212> PRT
<213> Homo sapiens
                                                       r·
<400> 218
Ser Val Pro Gly Tyr Asp Ser Ser Pro Asp
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<210> 219
<211> 5
<212> PRT
<213> Homo sapiens
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Xaa Cys Gly Thr Arg
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Gly Gly Ser Pro Gly Gly
               5
<210> 221
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Asp Gly Xaa Leu Cys Ala Xaa Leu Ile Val Ile Gln Leu Pro
<210> 222
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Arg Arg Val Arg Lys Ala Val Leu Arg Glu Gly Ser Cys Arg Pro Leu
Gln Leu Asp Phe Ile Gln Ser His Cys Gln Asn Leu Ile Ala Leu Pro
                            40
Xaa Ile Ser Leu Ser
 50
<210> 223
<211> 12
<212> PRT
<213> Homo sapiens
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Leu Arg Ile Cys Tyr Arg Arg Gln Asn Ser Leu Ser
<210> 224
<211> 19
<212> PRT
<213> Homo sapiens
<400> 224
Pro Pro Gly Gln Ile Phe Lys Arg Arg Gly Val Gly Tyr Phe Leu Val
                5
                                    10
Gly Glu Ala
<210> 225
<211> 46
<212> PRT
<213> Homo sapiens
<400> 225
Val Met Asp Ser Lys Val Leu Ile Val Phe Phe Phe Ser Glu Thr Ser
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Cys Ser Ile Phe Leu Pro Phe His Pro Pro Tyr Phe Pro Arg Leu His 25

Phe Met Pro Gly Val Ser Ser Leu Thr Pro Leu Gln Ala Val 40

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<211> 21
<212> PRT
<213> Homo sapiens
<400> 226
Gly Phe Ser Pro Gly Ser Ala Ser Ala Asp Cys Leu His Thr Phe Gln
                                    10
Phe Leu Arg Thr Arg
            20
<210> 227
<211> 24
<212> PRT
<213> Homo sapiens
<400> 227
Ser Phe Leu Pro His Leu Ala Leu Ala Leu Ser Leu Thr Thr Gln Ala
Asp Ala Met Ser Gly Leu Phe Leu
<210> 228
<211> 7
<212> PRT
<213> Homo sapiens
<400> 228
Ile Leu Tyr Asn Asp Ser Met
<210> 229
<211> 12
<212> PRT
<213> Homo sapiens
Ile Thr Gly Pro Cys Pro Gln Ser Lys Gln Ala Phe
<210> 230
<211> 10
<212> PRT
<213> Homo sapiens
<400> 230
Ala Asn Lys Leu Lys Ile Lys Phe Ala His
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<210> 231
<211> 37
<212> PRT
<213> Homo sapiens
<400> 231
Leu Phe Tyr Ser Ile Gln Asp Gly Gly Gly Trp Gly Gly Gly Ala Asp
                                     10
Cys Leu Phe Ser Leu Trp Tyr Leu Gly Arg Ala Glu Ala Leu Ser Ser
                                 25
Pro Ala Leu Gly Phe
<210> 232
<211> 23
<212> PRT
<213> Homo sapiens
<400> 232
Val Ala Tyr Ser Glu Cys Tyr Cys Val Gln Leu Leu Val Asp Ile Trp
Ser Leu Met Val Trp Ser Leu
           2.0
<210> 233
<211> 4
<212> PRT
<213> Homo sapiens
<400> 233
Ala Leu Ala Leu
<210> 234
<211> 10
<212> PRT
<213> Homo sapiens
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Leu Trp Met Ala Phe Leu Gly Val Ser Ser
               5
<210> 235
<211> 9
<212> PRT
<213> Homo sapiens
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<400> 235
His Gly Tyr Arg Ile Ser Leu Lys Ile
               5
<210> 236
<211> 18
<212> PRT
<213> Homo sapiens
<400> 236
Met Leu Gly Glu Arg Cys Gly His Thr Ile Met Val Pro Ile Gln Asn
                                    10
Asn Pro
<210> 237
<211> 13
<212> PRT
<213> Homo sapiens
<400> 237
Asn Ser Leu Lys Leu Gly Val Arg Cys Phe Gln Pro Lys
<210> 238
<211> 33
<212> PRT
<213> Homo sapiens
<400> 238
His His Lys Ala His Leu Ser Thr Gly Ser Asp Ser Pro Lys Ala Ile
                5
Arg His Thr Thr Ser Met Thr Ile Thr Gln Trp Ile Gly Lys Val Thr
            20
                                25
Gln
<210> 239
<211> 7
<212> PRT
<213> Homo sapiens
<400> 239
Asp Cys Pro Ser His Ser Arg
                5
```

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<210> 240
<211> 40
<212> PRT
<213> Homo sapiens
<400> 240
Glu Asn Ala Ala Val Thr Ala Val Ser Cys Tyr Phe Ala Tyr Pro Met
                                   10
Leu Arg Leu Ile Arg Gln Lys Ile Leu Ser Leu Ser Pro Thr Phe Cys
           20
                               25
Ser Lys Leu Glu Glu Ile Ile Glu
      35
<210> 241
<211> 4
<212> PRT
<213> Homo sapiens
<400> 241
Ile Asn Arg Ala
<210> 242
<211> 14
<212> PRT
<213> Homo sapiens
<400> 242
Pro Gln Lys Gly Ser Lys Phe Val Phe Ser Leu Asn Ile Ser
<210> 243
<211> 8
<212> PRT
<213> Homo sapiens
<400> 243
Gly Leu Gln Gly Ala Ala Pro Arg
<210> 244
<211> 38
<212> PRT
<213> Homo sapiens
<400> 244
Arg Ala Gly Leu Arg Leu Cys Val Pro Val Leu Gly Ser Pro Gln
            5
                       10
```

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Leu Pro Ser Thr Thr Thr Pro Ile Pro Ser Asn Phe Ile Phe Ser Cys
Gln Trp Glu Gly Ala Gly
<210> 245
<211> 37
<212> PRT
<213> Homo sapiens
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<223> Variable amino acid
Arg Lys Gln Pro Arg Arg Gly Thr Glu Gln Leu Arg Ala Ser Arg Thr
Gly Pro Asp Lys Arg Pro Trp Ser Leu Ser Pro Ser Leu Thr Cys Ser
Cys Pro Trp Arg Xaa
        35
<210> 246
<211> 19
<212> PRT
<213> Homo sapiens
Gln Val Arg Glu Ala Asn Leu Val Ser Ala Gly Asn Gly Ser Tyr Val
                                    10
Asp Cys Leu
<210> 247
<211> 46
<212> PRT
<213> Homo sapiens
<220>
<221> MOD RES
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<222> (9)..(9)

<223> Variable amino acid

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Leu Gly Pro Leu Trp Leu Lys Ser Xaa Gly Arg Ser Gly Arg Arg Leu
Ile Pro Met Leu Tyr Phe Leu Cys Ala Leu Met Phe Leu Asp Thr Gln
Met Ala Val Ala Lys Thr Ser Ser Gly Leu Tyr Leu Ile Ile
                            40
<210> 248
<211> 11
<212> PRT
<213> Homo sapiens
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Thr Phe Val Pro Asn Tyr Leu Lys Pro Trp Ser
<210> 249
<211> 4
<212> PRT
<213> Homo sapiens
<400> 249
Thr Pro Gln Thr
<210> 250
<211> 15
<212> PRT
<213> Homo sapiens
Gly His Arg Lys Glu Thr Cys Leu Ser Ser Ser Ile Arg Leu His
                                    10
<210> 251
<211> 40
<212> PRT
<213> Homo sapiens
Phe Leu Pro Ser Leu Leu Pro Ala Ile Gly Ala Pro Trp Cys Leu
                                    10
Arg His Asn Cys Leu Thr Met Trp Ser Glu Leu Trp Val Arg Leu Thr
            20
                                25
```

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Thr Glu Leu Gln Phe Leu Val Ser
  35
<210> 252
<211> 18
<212> PRT
<213> Homo sapiens
<400> 252
Pro Cys Gln Phe Pro Gly Leu Lys Lys Gly Ser His Ile Lys Tyr
                                    10
Leu Phe
<210> 253
<211> 22
<212> PRT
<213> Homo sapiens
<400> 253
Ala Gln Cys Glu Leu Lys Leu Asp Phe Gly Gly Trp Arg Val Ala Trp
Met Gln Arg Ala Arg Gln
           2.0
<210> 254
<211> 7
<212> PRT
<213> Homo sapiens
<400> 254
Arg Arg Glu Ser Trp Glu Gly
<210> 255
<211> 7
<212> PRT
<213> Homo sapiens
<400> 255
Glu Ala Gly Ile Phe Pro Cys
               5
<210> 256
<211> 7
<212> PRT
<213> Homo sapiens
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<400> 256
Cys Pro Ile Ile Phe Val Ser
        5
<210> 257
<211> 26
<212> PRT
<213> Homo sapiens
<400> 257
Asn Asn Ser Ser Asp Phe Met Gly Ile Gly Val Arg Arg Lys Glu Ser
                                   10
Val Gly Thr Asp Gly Thr Pro Ser Val Asp
           20
<210> 258
<211> 7
<212> PRT
<213> Homo sapiens
<400> 258
Ser Leu Arg Lys Leu Trp Glu
    5
<210> 259
<211> 42
<212> PRT
<213> Homo sapiens
<400> 259
Ala Arg Gly Val Cys Lys Val Asp Glu Met Arg Arg Leu Trp Trp Gly
Gly Val Leu Gly Val Ile Gly Pro Leu Thr Gly Ile Asp Gly Lys Leu
                               25
Cys Val Gly Arg Pro Val Val Pro Pro Thr
<210> 260
<211> 50
<212> PRT
<213> Homo sapiens
<400> 260
Leu Ala Leu Arg Leu Ala Gly Leu Glu Gly Ala Ser Thr Leu Asn Leu
                                   10
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Gly Glu Ser Ala Ser Val Thr Arg Arg Asn Arg Lys Arg Arg His Pro 20 25 30

Gly Arg Glu Leu Leu Ala Ile Val Ser Ser His Gly Pro Gly Phe Gly 35 40 45

Lys Asn 50

<210> 261

<211> 26

<212> PRT

<213> Homo sapiens

<400> 261

Glu Arg Val Val Thr Leu His Pro Gln Lys Ser Pro Leu Ser Leu Phe 1 5 10 15

Gly Leu Ser Arg Leu Arg Glu Glu Asn Val 20 25

<210> 262

<211> 84

<212> PRT

<213> Homo sapiens

<400> 262

Cys Gly Lys Ser Asn Leu Thr Tyr Pro Asp Val Ser Val Asn Glu Ile 1 5 10 15

Ser Gly Met Arg Met Glu Ile Gln Leu Cys Phe Ser Met Ala Glu Gly 20 25 30 .

Leu Arg Ile Pro His Pro His Pro Thr Gly Arg Glu Ser Ser Asn His 35 40 45

Pro Thr Trp Gly Ser Glu Asp Met Thr Leu Thr Gln Ser Arg Ala 50 55 60

Glu Ile Glu Thr Leu Pro Pro Val Leu Ser Pro Thr Lys Pro His Gln 65 70 75 80

Ser Phe Ile Asn

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<210> 263
<211> 49
<212> PRT
<213> Homo sapiens
<400> 263
Leu Val Asp Ala Asn Tyr Asp Pro His Pro Ser Gly Leu Cys Ser Pro
               5
                                    10
Phe Asn Leu Asp Glu His His Pro Arg Leu Phe Thr Gly Pro Pro Glu
                                25
Ala Glu Phe Gly Tyr Ser Val Leu Gln His Val Gly Gly Gln Arg
Trp
<210> 264
<211> 14
<212> PRT
<213> Homo sapiens
<400> 264
Glu Gly Lys Gln Arg Thr Val Gly Ser Gly Leu Cys Thr His
               5
                                    10
<210> 265
<211> 9
<212> PRT
<213> Homo sapiens
<400> 265
Arg Gly Gly Pro Val Gln Ala Gly Leu
<210> 266
<211> 80
<212> PRT
<213> Homo sapiens
<400> 266
Lys Cys Leu Gly Leu His Asp Val Ser Cys Thr Leu Pro Leu Thr Ile
               5
Leu Arg Thr Met Leu Thr Gly Ser Leu Tyr Pro Tyr Ser Pro Ser Arg
            20
                                25
                                                30
Met Leu Val Gly Ala Pro Trp Asp Gly Pro Ser Gly Asp Arg Arg Gly
```

40

35

```
Asp Val Tyr Arg Cys Ser Ile Gly Gly Phe His Ser Ala Pro Cys Thr
              55
    50
 Lys Gly His Leu Gly Lys Lys Pro Asp Leu Ser Pro Ala Asn Ser
 65
                    70
                                       75
 <210> 267
 <211> 16
 <212> PRT
 <213> Homo sapiens
 His Leu Val Thr Leu Thr Pro Trp Thr Leu Ser Ser Met Thr Leu Asn
                                    10
 <210> 268
 <211> 7
 <212> PRT
 <213> Homo sapiens
 <400> 268
Arg Ser Arg Thr Met Thr Pro
                5
<210> 269
<211> 43
 <212> PRT
<213> Homo sapiens
<400> 269
Leu His Ser Leu Leu Pro Phe Leu Gln Pro Gly Asp Tyr Gln Leu Gly
Asn Ser Ser Gln Pro Ala Val Asn Met His Leu Gly Met Ser Leu Leu
Glu Thr Asp Ala Asp Gly Gly Phe Met Val Ser
<210> 270
<211> 71
<212> PRT
<213> Homo sapiens
`<400> 270
Lys Lys Gly Leu Arg Arg Phe Thr Ala Gly Lys Arg Ala Leu Trp Tyr
           5
                                    10
                                                       15
```

Leu Gly Ser Gly Gly Leu Gly Leu Ser Ser Gln Cys Ser Gly Gly Arg 20 25 30

Val Arg Pro Asp Leu Gln Ser Glu Leu Gln Asp Ser Gln Gly Tyr Ala 35 40 45

Glu Lys Pro Cys Phe Glu Lys Pro Lys Thr Lys Thr Asn Gln Thr Thr 50 60

Thr Thr Glu Lys Ala Pro Trp 65 70

<210> 271

<211> 14

<212> PRT

<213> Homo sapiens

<400> 271

Gly Lys Leu Val Cys Ile Glu Glu Thr Arg Asn Ser Lys Pro 1 10

<210> 272

<211> 16

<212> PRT

<213> Homo sapiens

<400> 272

<210> 273

<211> 71

<212> PRT

<213> Homo sapiens

<400> 273

Val Cys Val Pro Arg Gly Pro Leu Lys Pro Gly Asp Asn Tyr Phe Ser 1 5 10 15

Tyr Pro Pro Arg Pro Val Pro Leu Phe Gly Leu Val Pro Ala Ala Ala 20 25 30

Leu Ser Ser Val Leu Glu Tyr Val Pro Val Trp Met Leu His Ser Gly 35 40 45

Pro Arg Glu Ala Trp His Pro Pro Pro Asn Val Ser Gln Trp Lys Gly 50 55 60

Pro Gly Ser Ser Val Pro Arg 65 70

<210> 274

<211> 118

<212> PRT

<213> Homo sapiens

<400> 274

Met Ala Ile Leu Ile Ile Pro Lys Cys Ala Cys Arg Arg Gly Ser Cys 20 25 30

Leu Leu Thr Asp Asn Ser Asp Ser Leu Gly Glu Pro Gln Asp Thr Arg 35 40 45

Ile Trp Phe Tyr Gln Leu Lys Asn Lys Thr Lys Gln His Ile Leu Cys 50 55

Thr Ala Tyr Pro Ser Ser Ile Thr Cys Pro Pro Tyr Leu Ile Phe Val 65 70 75 80

Gly Leu Ile Asp Ala Lys Ser Ala Leu Ser Tyr Trp Val Leu Pro Ser 85 90 95

Cys Leu Ser Tyr Thr Phe Leu Ser Thr Ala Phe Trp Glu Ile Val Leu 100 105 110

Cys Ser Pro Gly Cys Pro 115

<210> 275

<211> 15

<212> PRT

<213> Homo sapiens

<400> 275

Ser Trp Asn Leu Leu Ala Ser Ala Ser Gln Ser Gln Val Leu Gly
1 5 10 15

<210> 276

<211> 17

<212> PRT

<213> Homo sapiens

-100 > 276

Ala Cys Ile Val Cys Leu Ala Phe Ala Glu His Ala Leu Cys Gly His 1 $$ 5 $$ 10 $$ 15

Trp

<210> 277

<211> 101

<212> PRT

<213> Homo sapiens

<400> 277

Gly Met Ser Gln Ile Leu Pro Ser Pro Thr Thr His Thr Gln Thr Lys 1 $$ 5 $$ 10 $$ 15

Val Arg Leu Ser Lys Cys Ser Ile Ala Gln Gly Ser Gly Arg Pro Leu 20 25 30

Ala Ser Ala Tyr Phe Ile Leu Leu Cys Pro Ser Leu Leu Ser Leu 35 40 45

Ile Ser Thr Leu Gly Thr Trp His Ser Thr Phe Leu Val Ile Lys Arg 50 55 60

Glu Phe Pro Phe Lys Cys Leu His Cys Ser Val Leu Leu Gly His Ser 65 70 75 80

Pro Leu Leu Thr Thr Pro His Ile Leu Pro Cys Phe Leu Phe Pro Ile

Thr Met Pro Pro Phe 100

<210> 278

<211> 31

<212> PRT

<213> Homo sapiens

<400> 278

Ala Val Pro His Thr Trp Met Ser Ser Leu Phe Trp Met Ala Pro Thr 1 5 10 15

Val Ser Ile Pro Gly Gln Lys Phe Arg Leu Ser Phe Gly Gly Trp
20 25 30

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<210> 279
<211> 11
<212> PRT
<213> Homo sapiens
<400> 279
Glu Asp Cys Ser Ser Ile Arg Ser Arg Tyr Arg
            5
                                    10
<210> 280
<211> 12
<212> PRT
<213> Homo sapiens
Glu Lys Asp Met Trp Ile Gly Leu Glu Gly Lys Lys
<210> 281
<211> 7
<212> PRT
<213> Homo sapiens
<400> 281
Thr Leu Leu Asp Pro Trp Met
               5
<210> 282
<211> 25
<212> PRT
<213> Homo sapiens
<400> 282
Ala Ala Met Ser Ser Leu Leu Met Thr Pro Trp Asp Ile Val Phe Tyr
                                    10
Arg Thr His Ala Gln Glu Leu Cys Asn
<210> 283
<211> 11
<212> PRT
<213> Homo sapiens
<400> 283
Leu Thr Lys Lys Ser Gln Lys Phe His Asn Val
             5
<210> 284
<211> 18
<212> PRT
<213> Homo sapiens
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<400> 284
Ser Lys Phe Met Ile Val Trp Gly Ala Thr Leu Arg Ala Ser Leu Cys
Cys Leu
<210> 285
<211> 7
<212> PRT
<213 > Homo sapiens
<400> 285
Leu Leu Gly Gln Cys Met Pro
<210> 286
<211> 58
<212> PRT
<213> Homo sapiens
<400> 286
Thr His Leu Phe Thr Ser Pro Ser Ser Cys Cys Arg Leu Asp Thr Pro
Val Arg Gly Ser Leu Pro Leu His Pro Leu Cys Ser Ile Phe Ser Thr
                                25
Leu Phe Ile His Pro Met Trp Ala His Gly Leu Leu Phe Ser Gly Arg
Thr Gly Thr Val Arg Gly Glu Pro Cys Ala
   50
                       55
<210> 287
<211> 45
<212> PRT
<213> Homo sapiens
<400> 287
Val Val Pro Gly Arg Leu Pro Asn Lys Gly Arg Ser Cys Glu Ser Ser
                5
                                    10
Lys Glu Pro Lys Ser Glu Gly Arg Ala Arg Asn Glu Asn Arg Pro Ser
```

Asp His Gly Gly Met Val Arg His Cys Lys Gly Val Val

40

```
<210> 288
<211> 38
<212> PRT
<213 > Homo sapiens
<400> 288
Gly Arg Arg Lys Asp Gln Gln Gly Glu Gly Glu Gly Leu Glu Cys Ser
                                   10
                                                       15
Val Tyr Ile Thr Arg Cys Ser Gly Arg Leu Ser Leu Ser Ala Cys Gln
                               25
Lys Phe Val Glu Glu Gly
       35
<210> 289
<211> 42
<212> PRT
<213> Homo sapiens
<400> 289
Val Ala Val Thr Ile Leu Ser Leu Thr Val Phe Ala Phe Tyr Gly Val
Cys Gly Cys Ile Ser Pro Cys Leu Phe Cys Phe Cys Thr Gln Asn Ser
           20
                               25
Ile Phe Pro Leu Leu Leu Arg Gln Phe
                           40
<210> 290
<211> 9
<212> PRT
<213> Homo sapiens
<400> 290
Tyr Leu Ala Ser Gln Pro Leu Thr Pro
1 5
<210> 291
<211> 5
<212> PRT
<213> Homo sapiens
<400> 291
Tyr Ser Phe Gln Thr .
               5
```

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<210> 292
<211> 6
<212> PRT
<213> Homo sapiens
<400> 292
Thr Ser Gly Glu Ala Thr
1
<210> 293
<211> 9
<212> PRT
<213> Homo sapiens
<400> 293
Pro Asp Cys Leu Tyr Ser Pro Val Pro
<210> 294
<211> 14
<212> PRT
<213> Homo sapiens
<400> 294
Ser Cys Gln Pro Lys Cys Leu Leu Asn Glu Ser Ile Asn Lys
<210> 295
<211> 47
<212> PRT
<213> Homo sapiens
<400> 295
Cys Leu Tyr Ile Phe Thr Leu Met Thr Asp Tyr Phe Ile Cys Ser Val
            5
Pro Ser Lys Gln Ser Ser Cys Asp Ser Val Pro Val Cys Met Leu Asp
           20
                                25
Thr Val Gly Glu Trp Cys Arg Arg His Leu Thr Ser Val Asn Cys
                            40
<210> 296
<211> 25
<212> PRT
<213> Homo sapiens
<400> 296
Tyr Thr Ile Arg Ala Cys Leu His Ala Ser Leu Cys Val Cys Ala Cys
                5
```

Ile Cys Thr His Ile His Met Thr Ile \$20\$

<210> 297

<211> 100

<212> PRT

<213> Homo sapiens

<400> 297

Gly Gly Arg Pro Glu Ala Ala Arg Leu Leu Val Val Val Thr Asp Gly 20 25 30

Ala Gly Arg Val Thr Arg Tyr Gly Ile Ala Val Arg Leu Asp Gln Val 50 60

Gln Leu Phe Cys Phe Val Leu Tyr Arg Val Cys Val Cys Val Cys Val 65 70 75 80

Cys Val Cys Val Cys Val Cys Val Ile Cys Val His Ala Ser 85 90 95

Val His Ile Pro

<210> 298

<211> 34

<212> PRT

<213> Homo sapiens

<400> 298

Cys Val Tyr Ala Gly Gln Arg Thr Thr Ser Asp Val Gly Pro His Leu
1 10 15

Pro Ser Cys Ser Lys Leu Asp Ile Leu Phe Thr Ser Ala Tyr Asn Lys 20 25 30

Pro Asp

<210> 299

<211> 48

<212> PRT

<213> Homo sapiens

<400> 299

Trp Phe Glu Ala Phe Trp Asn Leu Gln Ile Ser Leu Ile Ser Asn Ser 20 25 30

Cys Ser Pro Gly Asp Pro Leu Val Leu Glu Arg Pro Pro Pro Arg Glu 35 40 45